

Prevention of (Reoccurrence) of Ankle Sprains in Sports

By

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Facts about ankle sprains

Ligamentous ankle injuries are some of the most common injuries across a wide variety of sports. They occur most commonly in soccer, volleyball, basketball, and all sports that involve jumping, side-stepping, running, and change of directions. They account for 10% - 30% of all sports injuries.

Ankle inversion sprains are the most common sports trauma. They typically occur as the foot flexes downward (plantar flexion) and rolls in (inversion/supination) the outside (lateral) ankle ligamentous complex is typically damaged during ankle inversion sprain.

Ankle sprains exhibit the highest percentage recurrence rate with high subsequent chronic symptoms. The reported recurrence rate for lateral ankle sprains is 80%.

Causes and Risk Factors

- 1) One of the most common causes is lack of conditioning. If the muscles, tendons, and ligaments around the ankle joint have not been trained or conditioned, this can lead to a weakness that may result in ankle sprains. A simple conditioning program that helps to even out any imbalances at the ankle will help considerably
- 2) Lack of proper warm up - dynamic warm-up is always the choice before an athletic event
- 3) Inadequate footwear or training on uneven ground
- 4) The most common risk factor is a *previous history* of ankle sprains that haven't been through conditioning/proprioception exercises to strengthen it

Balance and Proprioception

Having balance and proprioception is essential to athletes. Proprioception is the ability to determine where a joint is in space. This helps the brain know if the body is off balance. Proprioception is especially important to athletes who have had ankle injuries. (A new study in the American Journal of Sports Medicine by Everet Verhagen proves that proprioceptive balance board training is effective for the prevention of recurrent ankle sprains). Balance and proprioception can be increased by standing on one or two legs on a flat or wobbly surface. See illustration below:





Ankle Inversion Strength (start position)

Tie elastic to something stable situated to the outer side of the foot. Loop other end around your foot.



Ankle Inversion Strength (end position)

With the toes kept up, rotate the foot inwards, hold briefly, then return to start. Keep heel on the ground, shin straight forward, and do not allow entire leg to rotate.



Ankle Eversion Strength (start position)

Tie elastic to something stable, or step on it with unaffected foot. Loop the other end around the exercising foot.



Ankle Eversion Strength (end position)

With the toes kept up, turn the foot outwards, hold briefly, then return to start. Keep heel on the ground, shin straight forward, and do not allow entire leg to rotate.

Just In

Many studies have found same-side gluteus maximus weakness following ankle inversion sprains.



Glute Activation

Squeeze glutes together

Drive heel into ground

Single-leg march

See ad on pg.

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